

VIRAL DELIVERY SYSTEM FOR INFECTIOUS TRANSFER OF LARGE GENOMIC DNA INSERTS

ABSTRACT OF THE DISCLOSURE

The present invention relates to HSV-based amplicon vectors carrying a genomic DNA fragment, and methods of constructing and using the same. Included within the present invention is a method of converting any large capacity DNA cloning vector, such as a BAC or PAC, into an HSV amplicon or hybrid HSV amplicon using site-specific, or other types of recombination, so that genomic DNA inserts within the BAC or PAC clone can be delivered by infection to a cell, and efficiently expressed. The present invention also relates to a system for the rapid creation of viral vectors carrying transgenes of interest. This aspect of the invention is accomplished through recombination between: (a) a large-capacity cloning vector carrying a viral genome, and (b) a transfer vector containing the transgene of interest. Finally, an expression-ready genomic DNA library is disclosed.